RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/620,795A
Source:	IFW/b.
Date Processed by STIC:	7/19/06
•	

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 07/19/2006
PATENT APPLICATION: US/10/620,795A TIME: 09:21:32

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw

```
3 <110> APPLICANT: BARBOUR, ALAN G.
        CARTER, CAROL
 6 <120> TITLE OF INVENTION: A DIAGNOSTIC TEST FOR INFECTION WITH A SPIROCHETE BORNE
        BY AMBLYOMMA AMERICANUM
 9 <130> FILE REFERENCE: UTSK:352USC1
11 <140> CURRENT APPLICATION NUMBER: 10/620,795A
12 <141> CURRENT FILING DATE: 2003-07-14
14 <150> PRIOR APPLICATION NUMBER: 08/437,013
15 <151> PRIOR FILING DATE: 1995-05-08
17 <150> PRIOR APPLICATION NUMBER: 09/275,506
18 <151> PRIOR FILING DATE: 1999-03-24
20 <160> NUMBER OF SEQ ID NOS: 38
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 641
26 <212> TYPE: DNA
27 <213> ORGANISM: Artificial Sequence
29 <220> FEATURE:
30 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
31
        Primer
33 <400> SEOUENCE: 1
34 acatattcag atgcagacag aggttctatt caaattgaaa ttgaacaact tacagatgaa 60
35 attaacagag ttgctgatca ggctcaatac aaccagatgc atatgttatc taacaaatca 120
36 tetgeteaaa atgtaaaaac tgetgaagag ettggaatge aacetgeaaa aattaataca 180
37 ccagcatcac taactggagc acaagcttca tggacattga gagttcaggt aggtgcaaat 240
38 caggatgaag caattgctgt taatattttc tcaactaatg ttgcaaatct ttttggtgga 300
39 gaaggtgttc aagcggctcc agctcaagag ggtgcacaac aggagggagt tcaaccagct 360
40 ccagctcaag gtgggattag ctctccaatt aatgttacaa ctgctattga tgctaatgca 420
41 tegettacaa agattgaaga tgetattaga atggtaactg atcaaagage aaatettggt 480
42 gctttccaaa atagacttga gtctgttaaa gctagcacag attatgctat tgaaaactta 540
43 aaagcgtctt atgctcaaat taaagatgca ataatgacag atgaaattgt agcatctaca 600
44 accaacagta ttttgacaca atctgcaatg gctatgattg c
47 <210> SEQ ID NO: 2
48 <211> LENGTH: 213
49 <212> TYPE: PRT
50 <213> ORGANISM: Artificial Sequence
52 <220> FEATURE:
53 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
         Peptide
56 <400> SEQUENCE: 2
57 Thr Tyr Ser Asp Ala Asp Arg Gly Ser Ile Gln Ile Glu Ile Glu Gln
                     5
60 Leu Thr Asp Glu Ile Asn Arg Val Ala Asp Gln Ala Gln Tyr Asn Gln
```

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw

```
61
                20
63 Met His Met Leu Ser Asn Lys Ser Ser Ala Gln Asn Val Lys Thr Ala
66 Glu Glu Leu Gly Met Gln Pro Ala Lys Ile Asn Thr Pro Ala Ser Leu
                            55
69 Thr Gly Ala Gln Ala Ser Trp Thr Leu Arg Val Gln Val Gly Ala Asn
                        70
72 Gln Asp Glu Ala Ile Ala Val Asn Ile Phe Ser Thr Asn Val Ala Asn
75 Leu Phe Gly Gly Glu Gly Val Gln Ala Ala Pro Ala Gln Glu Gly Ala
76
               100
                                   105
78 Gln Gln Glu Gly Val Gln Pro Ala Pro Ala Gln Gly Gly Ile Ser Ser
                               120
81 Pro Ile Asn Val Thr Thr Ala Ile Asp Ala Asn Ala Ser Leu Thr Lys
                           135
84 Ile Glu Asp Ala Ile Arg Met Val Thr Asp Gln Arg Ala Asn Leu Gly
                       150
87 Ala Phe Gln Asn Arg Leu Glu Ser Val Lys Ala Ser Thr Asp Tyr Ala
88
                   165
                                       170
                                                            175
90 Ile Glu Asn Leu Lys Ala Ser Tyr Ala Gln Ile Lys Asp Ala Ile Met
               180
                                   185
93 Thr Asp Glu Ile Val Ala Ser Thr Thr Asn Ser Ile Leu Thr Gln Ser
94
           195
                               200
                                                   205
96 Ala Met Ala Met Ile
       210
100 <210> SEQ ID NO: 3
101 <211> LENGTH: 1336
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
          Primer
109 <400> SEQUENCE: 3
110 ctggcagtgc gtcttaagca tgcaagtcag acggaatgta gtaatacatt cagtggcgaa 60
111 cqqqtqaqta acqcqtqqat aatctqccta cqaqatqqqq ataactatta gaaataatag 120
112 ctaataccga ataaagtcaa ttgagttgtt agttgatgaa aggaagcctt taaagcttcg 180
113 cttgtagatg agtctgcgtc ttattagcta gttggtaggg taagagccta ccaaggctat 240
114 gataagtaac cggcctgaga gggtgatcgg tcacactgga actgagatac ggtccagact 300
115 cctacgggag gcagcagcta agaatcttcc gcaatgggcg aaagcctgac ggagcgacac 360
116 tgcgtgaacg aagaaggtcg aaagattgta aagttctttt ataaatgagg aataagcttt 420
117 gtaggaaatg acaaggtgat gacgttaatt tatgaataag ccccggctaa ttacgtgcca 480
118 gcagccgcgg taatacgtaa ggggcgagcg ttgttcggga tcattgggcg taaagggtga 540
119 gtaggeggat atgtaagtet atgtgtaaaa taccaegget caactgtgga actatgetag 600
120 aaactgcatg actagagtct gataggggaa gttagaattc ctggtgtaag ggtggaatct 660
121 gttgatatca ggaagaatac cagaggcgaa agcgaacctc taggtcaaga ctgacgctga 720
122 gtcacgaaag cgtagggagc aaacaggatt agataccctg gtagtctacg ctgtaaacga 780
123 tgcacacttg gtgttaatcg aaaggttagt accgaagcta acgtgttaag tgtgccgcct 840
124 ggggagtatg ctcgcaagag tgaaactcaa aggaattgac gggggcccgc acaagcggtg 900
125 gagcatgtgg tttaattcga tgatacgcga ggaaccttac cagggcttga catatacagg 960
```

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw

126 atatagttag agataactac teteegtttg gggtetgtat acaggtgetg catggttgte 1020 127 gtcagctcgt gctgtgaggt gttgggttaa gtcccgcaac gagcgcaacc cttgttgtct 1080 128 gttaccagca tgtaaagatg gggactcaga cgagactgcc ggtgataagc cggaggaagg 1140 129 tgaggatgac gtcaaatcat catggccctt atgtcctggg ctacacacgt gctacaatgg 1200 130 cctgtacaaa gcgatgcgaa acagtgatgt gaagcaaaac gcataaagca ggtctcagtc 1260 131 caqattqaaq totqaaacto gacttoatga agttggaato gotagtaato gtatatcaga 1320 132 atgatacggt gaatac 135 <210> SEQ ID NO: 4 136 <211> LENGTH: 330 137 <212> TYPE: DNA 138 <213> ORGANISM: Artificial Sequence 140 <220> FEATURE: 141 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 142 Primer 144 <400> SEQUENCE: 4 145 aactgctgaa gagcttggaa tgcaacctgc aaaaattaat acaccagcat cactaactgg 60 146 agcacaagct tcatggacat tgagagttca ggtaggtgca aatcaggatg aagcaattgc 120 147 tgttaatatt ttctcaacta atgttgcaaa tctttttggt ggagaaggtg ttcaagcggc 180 148 tccagctcaa gagggtgcac aacaggaggg agttcaacca gctccagctc aaggtgggat 240 149 tageteteea attaatgtta caactgetat tgatgetaat geategetta caaagattga 300 150 agatgctatt agaatggtaa ctgatcaaag 330 153 <210> SEQ ID NO: 5 154 <211> LENGTH: 4 155 <212> TYPE: PRT 156 <213> ORGANISM: Artificial Sequence 158 <220> FEATURE: 159 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide 162 <400> SEQUENCE: 5 163 Gly Val Gln Ala 164 1 167 <210> SEQ ID NO: 6 168 <211> LENGTH: 9 169 <212> TYPE: DNA 170 <213> ORGANISM: Artificial Sequence 172 <220> FEATURE: 173 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 174 Primer 176 <400> SEQUENCE: 6 9 177 tctqctcaa 180 <210> SEQ ID NO: 7 181 <211> LENGTH: 12 182 <212> TYPE: DNA 183 <213> ORGANISM: Artificial Sequence 185 <220> FEATURE: 186 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Primer 189 <400> SEQUENCE: 7 190 ggtgttcaag cg 12

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw

193 <210> SEQ ID NO: 8 194 <211> LENGTH: 12 195 <212> TYPE: DNA 196 <213> ORGANISM: Artificial Sequence 198 <220> FEATURE: 199 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 200 Primer 202 <400> SEQUENCE: 8 203 gttcaaccag ct 12 206 <210> SEQ ID NO: 9 207 <211> LENGTH: 22 208 <212> TYPE: DNA 209 <213> ORGANISM: Artificial Sequence 211 <220> FEATURE: 212 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 213 Primer 215 <400> SEOUENCE: 9 216 aacagctgaa gagcttggaa tg 22 219 <210> SEQ ID NO: 10 220 <211> LENGTH: 26 221 <212> TYPE: DNA 222 <213> ORGANISM: Artificial Sequence 224 <220> FEATURE: 225 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 226 Primer 228 <400> SEQUENCE: 10 26 229 cgataatctt actattcact agtttc 232 <210> SEQ ID NO: 11 233 <211> LENGTH: 24 234 <212> TYPE: DNA 235 <213> ORGANISM: Artificial Sequence 237 <220> FEATURE: 238 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 239 Primer 241 <400> SEQUENCE: 11 242 acatattcag atgcagacag aggt 24 245 <210> SEO ID NO: 12 246 <211> LENGTH: 24 247 <212> TYPE: DNA 248 <213> ORGANISM: Artificial Sequence 250 <220> FEATURE: 251 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Primer 254 <400> SEQUENCE: 12 255 tgttagacgt taccgttact aacg 24 258 <210> SEQ ID NO: 13 259 <211> LENGTH: 20 260 <212> TYPE: DNA

261 <213> ORGANISM: Artificial Sequence

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw

263 <220> FEATURE: 264 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 265 Primer 267 <400> SEQUENCE: 13 20 268 ctggcagtgc gtcttaagca 271 <210> SEQ ID NO: 14 272 <211> LENGTH: 25 273 <212> TYPE: DNA 274 <213> ORGANISM: Artificial Sequence 276 <220> FEATURE: 277 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 278 Primer 280 <400> SEOUENCE: 14 25 281 catatagtct tactatgcca cttag 284 <210> SEQ ID NO: 15 285 <211> LENGTH: 31 286 <212> TYPE: PRT 287 <213> ORGANISM: Artificial Sequence 289 <220> FEATURE: 290 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide 293 <400> SEQUENCE: 15 294 Leu Arg Val Gln Val Gly Ala Asn Gln Asp Glu Ala Ile Ala Val Asn 297 Ile Phe Ser Thr Asn Val Ala Asn Leu Phe Gly Gly Glu Gly Val 298 20 25 301 <210> SEQ ID NO: 16 302 <211> LENGTH: 16 303 <212> TYPE: PRT 304 <213> ORGANISM: Artificial Sequence 306 <220> FEATURE: 307 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide 308 310 <400> SEQUENCE: 16 311 Gln Ala Ala Pro Ala Gln Glu Gly Ala Gln Gln Glu Gly Val Gln Pro 312 1 315 <210> SEQ ID NO: 17 316 <211> LENGTH: 20 317 <212> TYPE: PRT 318 <213> ORGANISM: Artificial Sequence 320 <220> FEATURE: 321 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Peptide 324 <400> SEQUENCE: 17 325 Ala Pro Ala Gln Gly Gly Ile Ser Ser Pro Ile Asn Val Thr Thr Ala 326 1 5 15 328 Ile Asp Ala Asn 329 332 <210> SEQ ID NO: 18

VERIFICATION SUMMARY

DATE: 07/19/2006

PATENT APPLICATION: US/10/620,795A

TIME: 09:21:33

Input Set : F:\UTSK352.APP.txt

Output Set: N:\CRF4\07192006\J620795A.raw